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'A riot, a market, a pilgrimage, a beating': aerial photography and anthropological method

Abstract: Aerial photography has, not without justification, been linked to projects of violence and domination. Yet recent scholarship in visual studies has called for an attention to the actual practices whereby aerial photographs are produced and put to use. This essay traces the history of aerial photography as a field method in cultural anthropology, highlighting the plural, deeply contextual nature of its applications. The essay concludes by sketching out three genres of aerial photography that are relevant to the anthropological project today, modes of seeing that harness the potential of technology while avoiding the totalizing logic of panopticism.

In a recent article published in *History of Photography*, Paula Amad makes the case for a rehabilitation of the aerial photograph. While it may be the view "from below" that has organized social and, particularly, postcolonial historiography since the 1970s, Amad argues that "a fuller history of the view 'from above', as materialised in aerial photography, might reveal perspectives which move beyond that view's conventional associations with pure power, mastery, and control" (2012: 86). Amad takes stock of the medium's historical entanglement with projects of military reconnaissance and colonial administration, and she acknowledges that there is "significant material evidence for the association of aerial vision with a negative, violent and even terroristic mode of modern vision" (69). Yet she looks to figures like Le Corbusier, Antoine Saint-Exupéry, and geographer Jean Brunhes for evidence of a less dystopian representational tradition around aerial photography, one that both humanizes the landscape and decenters human settlement from its pride of place in the natural environment. She also pushes back against a purely referential reading of the aerial photograph, emphasizing the training of photointerpreters

in a specialized visual hermeneutics as well as the disguising of aerial targets on the part of ground-based *camoufleurs.* Taken together, these strategies demonstrate for Amad "the plasticity of the aerial view across extremes of distance and proximity, aesthetic and military contexts, the eye and the body, the museum and the archive" (86).

Recuperating aerial photography is no easy task, though, because the ambivalence about it grows out of a long theoretical tradition linking vision with the predicaments of modernity. Martin Jay (1993) traces the history of philosophical challenges to the priority of vision at least as far back as Nietzsche, and Maurice Merleau-Ponty's rejection of *la pensée de survol* (1945) has particular resonance for the aerial view. More recently, though, two of the most trenchant critiques of visuality as a form of power have been those elaborated by Michel Foucault and Paul Virilio. For Foucault (1977), Jeremy Bentham's panopticon serves as the symbol of a disciplinary society of surveillance, in which an omnipresent field of gazes enlists the individual in his own subjection. The inspector in his elevated tower displaces the figure of the sovereign, perversely enacting the Rousseauist dream of "a transparent society, visible and legible in each of its parts, the dream of there no longer existing any zones of darkness" (Foucault 1980: 152). For Virilio, the production of images becomes a defining feature of modern war, giving rise to "the deadly harmony that always establishes itself between the functions of eye and weapon" (1989: 69). With the advent of aerial photography during World War I, aviation is reimagined as a way of seeing, one that opens up new horizons of bombardment. For Foucault, then, the problem with vision is its asymmetrical distribution under panopticism; for Virilio, though, violence has become constitutive of our very technologies of visuality.

Both of these worries have found their way into anthropological discussions of vision and, more specifically, the photographic image. By 1870, early anthropologists were using portrait

photography to compare the physiognomies of colonial subjects, often posing them in front of a standardized background known as a Lamprey grid (Pinney 2011: 27-29). As research practices began to change, though, the problem of "pose" became more vexing (Edwards 2011: 160) and a more naturalistic style came to prevail in the work of anthropologists like Evans-Prichard and Malinowski. In 1967, drawing on his experience as a photographer with the Farm Security Administration, John Collier would publish one of the first handbooks of visual anthropology, noting that "in the field of anthropology as a whole, photography remains an extraordinary rather than a usual method" (1967: 6). Yet even as efforts were being made to systematize this method, the reappraisal of anthropology's colonial legacy that began in the 1970s led to a new wave of scholarship examining the role of visuality in projects of domination (e.g., Said 1979; Fabian 1983). With this critique in the air, James Clifford's introduction to *Writing Culture* advocated a shift away from the all-too-photographic realism of ethnographic representation toward an embrace of textual practices "in a discursive rather than a visual paradigm" (1986: 12). While anthropological writing, with apologies to Clifford, has not quite given way to Bakhtinian polyphony, the wariness about vision inherited from this era has, arguably, become a matter of disciplinary orthodoxy. So-called ocularcentrism is here, and it is bad. Meanwhile, however, a small group of dissenters have been quietly examining "the productive possibilities that visual technologies offer for reclaiming the uncertainty and contingency that characterize anthropological accounts of the world" (Poole 2005: 161), from documenting the heterogeneity of non-Western photographic traditions (Pinney and Petersen 2003) to examining the material work that photographs do in an affect-laden object world (Edwards 2012).

Allying myself with these dissenters, while fully acknowledging the historical realities of panopticism and scopic violence, I want to propose the recuperation of aerial photography as a

research method for cultural anthropology. I am advancing this proposal in spite of the generally widespread availability of maps charting even the most far-flung locales, the absence of which was one motivating factor for anthropology's initial embrace of aerial photography. For the purposes of this essay, I do not discuss forms of remote sensing other than photography, although techniques such as satellite imaging have their own traditions in anthropology (e.g., Guyer et al. 2007) and, moreover, expanding anthropology's notion of seeing beyond the tiny band of wavelengths visible to the human eye seems to be consistent with a broader posthuman turn. I also do not discuss Google Earth, the interactive mapping program described by one commentator as "the most prominent manifestation and stimulant of this voracious contemporary appetite for views from above" (Dorrian 2011: 166), although I concede its potential importance to anthropology as both method and cultural practice worthy of investigation. In what follows, then, I offer three glimpses of anthropology's past engagement with aerial photography, before gesturing toward what I see as the grounds for future use. First, I discuss the pioneering work of Marcel Griaule, the onetime Air Force pilot who became the first anthropologist to use aerial images in the service of ethnographic research. Next, I examine an edited collection of articles from the 1970s that suggests some of the subsequent directions in which anthropology's relationship with photography developed. Finally, I consider Gregory Bateson's connection to the work of aerial photographer Terry Evans, drawing out continuities between Evans' aesthetic sensibility and Bateson's later ecological thought. Throughout my discussion, I follow Paula Amad in emphasizing the plasticity of the aerial view as it is mobilized in different anthropological contexts. By pluralizing what the aerial photograph can be made to mean, I hope to loosen its association with a "conquering gaze from nowhere" (Haraway 1988: 581) and to bring its somewhere into focus as a space of anthropological possibility.

Archaeologists were the first anthropologists to make use of aerial photography, and by the end of World War I German pilots flying reconnaissance missions over the Middle East were actually photographing ruins for archaeologists back home (Cosgrove and Fox 2010: 38). In 1928, British archaeologist O.G.S. Crawford published *Wessex from the Air*, the first major study of an excavation directed by original aerial photography. Eight years later, Marcel Griaule would take to the skies in a small French military plane to conduct a survey of Dogon villages in eastern Mali, then the French Sudan. Griaule's subsequent reflections on the innovation (1937b) are wonderfully practical: it had taken him forty-five days to compile a map of land parcels in an area of one square kilometer, covering the ground on foot. With the help of the aerial photographs, his research team was able to cut that time to fifteen days per square kilometer. This focus on saving time is significant, because it locates Griaule's work within what James Clifford has called "one of the few fully elaborated alternatives to the Anglo-American model of intensive participant observation" (1988: 60). Indeed, Eric Jolly confirms that "Griaule rejected the idea of a prolonged stay and a solitary researcher fully integrated into the society he studied" (2001: 169). Instead, Griaule preferred to work with a team of researchers who would arrive in a community and work briskly to collect, document, and interrogate. Later, his work with the Dogon sage Ogotemmêli would move his research toward what Clifford describes as the initatory mode, characterized by "dialogical processes of education and exegesis" (1988: 65). Yet here, too, the emphasis was on cultivating a research relationship with a few key informants, whose cosmological knowledge was taken to stand in for the whole of Dogon society.

Clifford regards Griaule as a more or less unreconstructed colonialist, and there is certainly evidence to support this view. In a 1937 piece of written testimony to the Institut Français d'Anthropologie, Griaule argues for the importance of aerial photography to scientific

fields including botany and geology, before turning to "that science called on to play a more and more important role in our colonial empire, ethnology" (1937b: 471). Ethnology, he explains, requires more than a good map: it aims to collect information on indigenous ways of life that can be gained more quickly and precisely using aerial photography. "It is important to repeat," Griaule emphasizes, "that this approach does not only serve theoretical ends. By all accounts, the materials collected constitute tools of the first order for the colonial administration: to govern a people, one must first understand them" (1937b: 473-474). Here, in a sense, the panoptic gaze is at work, although the individual is being apprehended not so much as a case than as a type, part of a Dogon collectivity. Hence, Griaule's interest in the use of aerial photography to study the patterned movement of crowds: "A riot, a market, a pilgrimage, a beating, a battle, a pastoral migration is easily followed by photography" (1948: 208). So while Griaule's complicity with colonial discipline is not in question, I want to suggest that James Clifford's indictment of Griaule for engaging in "a somewhat disturbing fantasy of observational power" (1988: 69) does not exhaust what there is to say about Griaule's relationship to aerial photography and visuality. Plainly, Griaule's enthusiasm for and access to aerial views of his informants rests on some form of scopic privilege, but not, I suggest, one reducible to the logic of the panopticon.

Through the documentation of ethnogaphic artifacts and, later, of esoteric teachings, Griaule worked to construct an elaborate symbolic system that would express a rich, cohesive, and distinctively Dogon form of thought. As Jeanne Haffner has pointed out (2010), aerial photography played a key role in connecting Griaule's symbolic system to the material world. Hence, in a 1937 article for *Journal de la Société des Africanistes*, Griaule offers a preliminary analysis of some totemic emblems painted on the walls of Dogon sanctuaries. Certain elements, like the sun and moon, were understood to represent their counterparts in the physical world.

However, other elements remained more elusive, including a checkerboard pattern that seemed to represent Dogon men, the fields around the village, and also a funerary blanket. The harvest, Griaule reasons, was often associated with reproduction in Dogon prayers, while the blanket might reference a funerary cult associated with fertility and wealth. Griaule admits that this analysis is provisional, but he places one more piece of evidence on the scale: Dogon gardens and certain fields are made of small squares, measuring about a meter, separated by a ridge designed to hold water. In a footnote, Griaule comments: "Seen from an airplane, Dogon gardens have the look of an extremely regular chessboard" (1937a: 72).

Here, the aerial view is deployed not as a panoptic technology of control, but as a means of identifying a sacred geometry invisible, at least to the researcher, from the ground. Whether Griaule got the symbolism right, of course, remains an open question (see van Beek 2004), but

his use of aerial photography to pick out what Mary Douglas would later call "natural symbols" (1970) remains an imaginative form of data collection.

Griaule's posthumously published *Méthode de l'Ethnographie* (1957) describes aerial photography as a valuable supplement to ground-based observation and the study of maps. While the handbook's introductory chapter gives a long list of the institutions and practices that are to be understood as ethnography's object, the section on aerial photography is more succinct: "Understanding a society rests principally on the understanding of its terrain" (83). The French word *terrain* is being used here in its geographical specificity, reflecting Griaule's ongoing concern with a society's adaptation to its *sol*, or soil, and yet it is significant that *terrain* has more recently come to mean "field," in the anthropological sense, and even "fieldwork" (Langlois 1999). For the handbook is clear that the aerial view, while illuminating, cannot serve as a substitute for terrestrial research: "It is best to combine operations on the ground and in the air. More precisely, one should begin by fixing one's landmarks, then taking aerial photographs, and finally proceeding, with photos on hand, to identify the terrain" (1957: 84). Here, aerial photography is understood as part of an iterative research methodology, in which insights gathered using one form of data collection can be folded into new lines of inquiry. There is some evidence that Griaule used aerial photography to pick out sacred sites that his informants did not want to show him, and Clifford takes Griaule to task for setting up a situation in which "he seems already to know where everything is" (1988: 70). Nonetheless, the handbook's emphasis on aerial photography's necessary triangulation with other modes of perception forestalls a reading of the view from above as total or totalizing. Under panopticism, the inspector need never come down from his observation tower; the aerial photographer must.

One other early piece of Griaule's writing, curiously uncited by Clifford, challenges any would-be portrayal of him as an uncritical scopophile. Shortly after returning from his first ethnographic fieldwork in Ethiopia, Griaule penned a short essay on the evil eye (1929) for *Documents*, the Surrealist periodical edited by Georges Bataille. One of the twentieth century's most bombastic critics of visuality, Bataille made a fetish of the enucleated eye in his pornographic novella *Histoire de l'Oeil* and later wrote in praise of the pineal gland, which he saw as a vestigial eye that longed to stare into the sun and destroy itself. Bataille's appreciation of Buñuel's *Un Chien Andalou*, which famously opens with the image of a razor blade slicing an open eye, appears just before Griaule's essay in *Documents*, as part of a feature known as *la dictionnaire critique.* Griaule's contribution is an odd one, reviewing the use of amulets and other charms to ward off the evil eye in primitive societies, but acknowledging that these superstitions also persist among the civilized. For the primitive, Griaule suggests, every eye is the evil eye, an obvious overstatement that nonetheless foreshadows the colonial appropriation of his aerial photography. Griaule's later writings may celebrate the clarity and lucidity of the view from above, but this is not at all the story he tells in

Représentation du Mauvais Œil dans une amulette abyssine.
Coll. M. Griaule.

Documents: "To look at an object with desire is to appropriate it, to take pleasure in it. To desire is to sully; to desire is to take, just as the primitive who senses a gaze on his property gives it away at once, as though it would be dangerous for him to keep it any longer, as though the gaze had conferred upon the object a force ready to be exercised against him" (1929: 218). On this account, the desirous gaze instrumentalizes and corrupts, but also, following Mauss, brings into a relation of exchange. What, then, might it mean to understand Griaule's aerial photographs as gifts along these lines? Without placing too much explanatory weight on a minor essay written at the beginning of his career, I would suggest that these lines evince a more complicated relationship to visuality than has been previously ascribed to Griaule and call for a renewed engagement with the visual medium that he brought to anthropology.

By the middle of the twentieth century, aerial photography had come into its own as an anthropological method, albeit one with a limited number of practitioners. Paul Chombart de Lauwe, an ethnographer and sociologist who had worked under Griaule in Cameroon, wrote the first handbook on the use of aerial photography for the study of man (1951) and produced an influential study of social life and spatial form in postwar Paris (1952). By using aerial photography to document actual patterns of urban habitation, Chombart de Lauwe broke with high modernist city planners like Le Corbusier and, in Jeanne Haffner's argument (2010), developed the notion of social space that would later be taken up by the likes of Henri Lefebvre. Outside of France, technological advances in camera design and film quality attracted new interest from Britain, Germany, and the Soviet Union, and John Rowe's account of using aerial views as both mapping technique and elicitation strategy (1953) introduced the method to an American audience. By the 1960s, there were at least three major research projects being carried out by US anthropologists with the help of aerial photography, including two in Mexico. One of

these, the Harvard Chiapas Project, was directed by Evon Vogt, a Chicago-trained anthropologist who worked for decades with the Tzotzil Maya of Zinacantan. Vogt's edited volume *Aerial Photography in Anthropological Field Research* (1974) remains the only English-language collection of ethnographic studies that incorporate aerial photographs, and as such it provides an invaluable account of research methodology in the post-Griaule era.

A review of the Vogt volume in *American Anthropologist* gently criticized the collection for lacking "a thread of continuity holding the articles together" (Gumerman 1976: 907), and this criticism is, on balance, a just one. The book is divided into three sections: Part One addresses "Changing Ecological Relationships," Part Two carries the vague title "Ethnographic Research and Analysis," and Part Three consists of a bibliographic essay. Without a synthetic introduction or a transcript of discussions at the 1969 conference which inspired the volume's compilation, the reader is left to determine how the different articles fit together, where they overlap and where they disagree. In Part One, for instance, contributions by archaeologists are paired with two pieces by ethnographers working in the tradition of culture and ecology. Of the two, Robert Hackenberg appears to be the more committed theoretician, developing an account of "ecosystemic channeling" (Vogt 1974: 28) in which environmental change constrains—and presumably also enables, although he does not say so—future human possibilities. Using aerial photographs of the Casa Grande Valley in New Mexico, Hackenberg demonstrates how the cultivation practices of the Valley's earliest inhabitants and large-scale irrigation projects in the modern period have shaped how and where the Pima Indians farm. Echoing Chaumont de Lauwe's skepticism of modernist planning, Hackenberg notes that of the four square miles that he surveyed from the air, "less than one-quarter of the area has been utilized in the manner anticipated by the development planners" (38). The other piece in Part One, by Thomas Schorr,

is more methodological in nature, seeking to assess how aerial photography might be "simplified and adapted to the limited technical means and restricted financial circumstances facing most field workers" (40). Schorr bristles at the suggestion that some applications of aerial photography might not be legitimate in the absence of highly specialized equipment, a stance that he deems "arbitrary and unwarranted, because of the erroneous impression it produces in the uninitiated of the inaccessibility of the method and techniques" (44). His own account of the techniques he employed in Colombia is exhaustive and refreshingly honest, estimating the expenses he incurred and noting necessary compromises. Schorr also emphasizes the value of anthropologists taking and interpreting their own photographs, and on this point he is entirely in agreement with Griaule: "Except in cases when the necessary refinements can be made by a professional, it is crucial that the researcher takes his own aerial views" (1957: 85).

In the opening chapter of Part Two, Evon Vogt takes the opposite position, asserting that "it would have been inefficient for the members of the Harvard Chiapas Project to attempt to carry out the proposed aerial survey, that is, to hire a plane, take the photos, interpret them, and prepare the necessary maps" (1974: 57). Having learned from their own failed 1962 attempt at aerial photography in Chiapas, Vogt and his collaborators would tap the Itek Corporation, a defense contractor with extensive ties to the Central Intelligence Agency, to carry out an aerial survey of the highlands region inhabited by Mayan speakers of Tzotzil and Tzeltal. The scope of the project was breathtaking: in February and March of 1964, some 6,400 square miles of territory were photographed by an Itek subcontractor, in addition to 958 additional square miles that were shot in high resolution. The resulting set of almost 3,000 aerial photographs represented what co-investigator George Collier would later describe as "total samples, which exhaust the universe of data under study" (92). By photographing the entirety of the territory

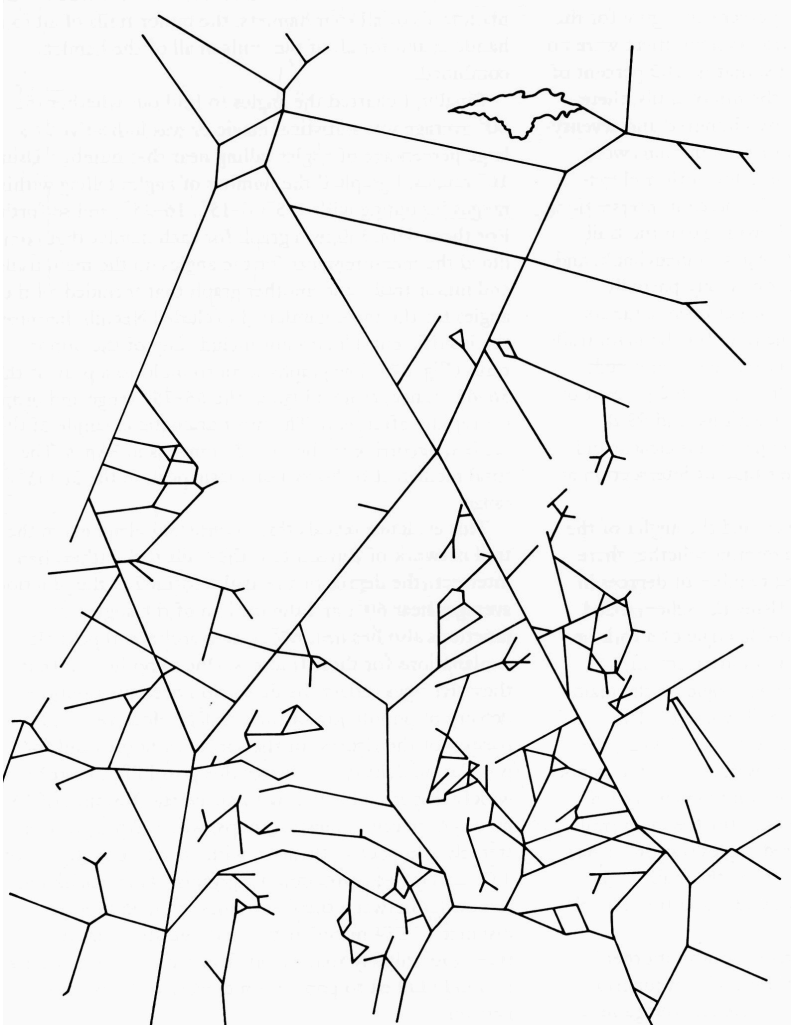
where they planned to work, the researchers from the Harvard Chiapas Project would avoid challenges to the generalizability of their results, although they would encounter "the bottleneck of having to sort and analyze new masses of detail on demographic and settlement patterns" (85). Processing the raw images into photomosaics and depth-enhancing stereograms was one means of coping with this profusion of detail, as was a print-based system of photo plot indexes designed to aid in image retrieval. Even so, the various investigators working on the Project would proceed to interpret and build on the aerial images in markedly different ways.

Vogt, in his article, lays out the major uses of aerial photographic data envisioned by the group at the outset: analyzing settlement patterns, mapping land use and ownership, understanding sacred

geography, improving the household census, and providing indices of cultural change. Of the other contributors to the volume, Richard Price appears to have hewn most closely to the original parameters of the project, using the photographs to identify planting patterns on communally held *ejido* land and then developing a multiyear model of farming strategies that predicted which crops would be planted at which altitude. George Collier devised a computerized method for plotting lineal descent groups onto spatial data from the photographs in order to examine how land inheritance had impacted the geographical distribution of kin. Finally, Gary Gossen invited informants in the *municipo* of Chamula to plot the locations of neighboring communities onto aerial photographs, in hopes of learning more about native categories of "near" and "distant" (Vogt 1974: 118). Ironically, the inability of Gossen's informants to plot locations in this way led him to try other elicitation techniques, and ultimately to conclude that Chamulas conceive of a place's physical proximity in direct proportion to its degree of perceived social similarity. In this context, the aerial photographs serve as what Gossen called "an objective control for the study of the inherently vague and elusive concept of world view" (122).

One other article on the Harvard Chiapas Project appears in the Vogt volume, and it is as remarkable for the circumstances of its origin as for its conclusions. The piece, by Linnea Holmer Wren, observes that "in Zinacantan, the business of life flows daily over the trails" (133). Outside of the district's ceremonial center, which was laid out in a grid pattern, the outlying hamlets where most of the population lives and farms are connected by a spidery network of trails. Wren used aerial photographs of four hamlets to generate lines of best fit for their trail systems, and discovered that Zinacanteco trails consistently tended to fork, rather than intersect, at angles around 60°. Displaying real ethnographic sensitivity to the "multitude of small decisions made every day by travelers as they walk" (139), Wren hypothesizes that the

consistent structure of trails arises both from a need for energy efficiency and a desire to limit nonkin movement through unguarded fields. Nowhere in the chapter does Wren mention that the piece was developed out of a class project for a Harvard Freshman Seminar taught by Vogt in 1966-67, during which students were encouraged to work with the aerial images from Chiapas. The maturity of Wren's undergraduate research is impressive, but her article also speaks to a hitherto unacknowledged use of aerial photography in anthropology: as a way of bringing the field back to the classroom. "It is clear," Vogt writes, "that aerial photos have become as crucial to many of our students as notebooks and typewriters" (76). By making it possible for first-year students to conduct original research on communities thousands of miles away, the Harvard Chiapas Project used aerial photography as a pedagogical tool as well as a method of inquiry. The fact that Wren went on to become a professor, currently teaching in Minnesota, surely suggests something about the lasting effects of her encounter with Zinacantan.



Five years after the publication of the Vogt volume, and just months before his death in 1980, Gregory Bateson sat down to write the introduction to a collection of photographs entitled

Prairie: Images of Ground and Sky. The Kansas-based photographer, Terry Evans, would later explain that she "never intended to photograph the prairie" (1986: 13), but that she had agreed to help some friends with the survey work they were doing on a prairie near her home. Evans became fascinated with the native grasses underfoot and began to photograph them, first from the ground and then from the air. The resulting collection of 62 images moves between intricate, knee-height details, more conventional landscape shots, and sweeping aerial views of unplowed prairie in both Kansas and Nebraska. Bateson lavished praise on the collection, noting that "we have not since the sixteenth century had artists whose prime direction was the synthesis between a scientific and an aesthetic understanding of nature" (1986: 12). Since then, Bateson lamented, the world to be investigated has been split between the mechanical and the aesthetic, and accordingly the human mind has approached that world with either imagination or rigor. In Bateson's judgment, Evans' photographs attempt the synthesis of these two admirable qualities, and in doing so they serve as "a sign of better times to come" (12).

What would prompt Bateson, who knew that he was nearing the end of his life, to become so invested in a collection of photographs by an as yet little-known artist? Of course, Bateson had used photography as a primary research tool in his own work, with Margaret Mead, on village life in Bali (Bateson and Mead 1942). But his attention to Evans' photography reflected Evans' own engagement with Bateson's later writings, specifically the 1979 book *Mind and Nature*, from which she borrowed the collection's epigraph: "What pattern connects the crab to the lobster and the orchid to the primrose and all four of them to me? And me to you? And all the six of us to the amoeba in one direction and to the backward schizophrenic in another? What is the pattern which connects all the living creatures?" (quoted in Evans 1986: 16). Evans explicitly drew on Bateson's language of pattern in her description of the prairie project,

explaining that "I found it impossible to discern any visual order or pattern of organization as I observed the ground, but I was convinced that a pattern must be there. I believed that if I only looked long enough and hard enough, I would eventually be able to see the pattern and thus to understand the prairie" (1986: 13). Indeed, it was this proliferation of patterns that would steer Evans toward aerial photography, a format with which she has subsequently become identified (see Evans 1998a, 1998b, 2005). While looking at a photograph of some sage coiled with prairie grass, she was reminded of spiraling galaxies in the night sky and realized, suddenly, "that the sky was a part of the prairie too" (1986: 14). Later, photographing the prairie from a plane, she was struck by the similarity of the patterns that were visible to her from both ground and sky.

There is an echo here of Marcel Griaule, spotting the checkerboard pattern of Dogon gardens on the walls of their sanctuaries. But if Griaule's aerial view allowed him to establish a correspondence between the material and the symbolic, then Evans, by way of Bateson, was more concerned with the continuity of the vital. "I have been a biologist all my life," Bateson confesses in *Mind and Nature* (1979: 8), and the questions that get taken up as Evans' epigraph were originally posed by Bateson in the context of a story about challenging students to see the morphology of a crab through a defamiliarized set of eyes. "How are you related to this creature?" Bateson wanted his students to consider. "What pattern connects you to it?" (1979: 9). In his later work, this pattern which connects would organize an approach to aesthetics grounded equally in ecology and cybernetics. For Bateson, the aesthetic sensibility was a sort of short cut into ecological thinking, formalizable in terms of pattern and redundancy (1972: 130) but experienced more immediately as elegance (1991: 255). Elegance, as opposed to ugliness, results from recognizing patterns of interrelation and then acting in light of them, but on the basis of aesthetic discernment rather than rational computation. Bateson saw this aesthetic sensibility as

characteristic of, though not necessarily distinctive to, human beings, and he allowed that it was subject to pathological disturbance. "But," he added, "if the aesthetically monstrous be symptomatic of cultural pathology, then we have to remember that in all such cases, the symptom is the system's attempt to cure itself. The creation of the appropriate monstrosities might therefore be a component in corrective action" (1991: 257).

Terry Evans' photographs, I argue, struck Bateson as elegant because they aestheticized the prairie in terms of its ecological interdependence. By drawing attention to continuities of form at different scales, the photographs thematized the metapattern that connected all life. For instance, Evans juxtaposes two strikingly similar images on facing pages of the collection:

On the right, the bare branches of winter trees recall the brushy texture of what turns out, on the left, to be an extreme closeup of bison fur. A common color palette of golds and browns emphasizes the continuity between organism and environment, terrestrial and aerial view. Recurring patterns transcend scale and confirm life's identity with itself.

More ambiguous are the numerous photographs of the prairie sky, only one of which appears to include a living thing, a hawk. How do Evans' images of roiling thunderclouds square

with the Batesonian project of vital interconnectedness? On one reading, the clouds could be modeled cybernetically in terms of a system that takes shape and then disperses, water droplets that are organized if not self-organizing. The vital materialism of Jane Bennett (2010) would lead in this direction, as would other versions of posthumanism that lean less heavily on vitalism. I am cautiously sympathetic to these projects, insofar as they represent efforts to rethink the kinds of pattern recognition on which connectedness, and by extension responsibility, might be sustained. However, such a reading of Evans' cloud photographs would move beyond Bateson, and it would also ignore the perspectival variety with which Evans treats the prairie sky:

The view on the left, looking up at the clouds from the ground, is the more common one in Evans' collection. But the view on the right looks out on the Kansas sky from an airplane, an aerial view linking the sky to the prairie as a habitat, a sphere of human habitation. I interpret this image as an invitation to inhabit the sky, as Evans has, and to produce images marked by an elegance that inheres in their recognition of patterned interconnectedness.

In the discussion above, I have presented three glimpses of anthropology's engagement with aerial photography, less a definitive portrait than a series of snapshots. Griaule, Vogt, and

Bateson represent three different aerial views, although each, I have argued, is irreducible to the panopticism of Foucault or the constitutive violence of Virilio. Each attempts to gain some insight into the relationship between human beings, or life more generally, and the environment that they reciprocally shape and are shaped by. Indeed, it would be worthwhile to undertake a more rigorous comparison of Griaule's notion of *terrain* with Vogt and Bateson's versions of ecology, as well as a comparison of their respective understandings of scale.

To close, though, I want to delineate three genres of aerial photography that I believe to be relevant to the anthropological project today, three modalities of seeing from the sky that stand to enrich existing or emerging research programs in the discipline. The first I call *images of conscience*, drawing on planner and urban theorist Erwin Gutkind's somewhat hyperbolic characterization of aerial photographs as "the moral conscience of mankind" (1956: 11). Explicitly activist research in anthropology is increasingly formulated in terms of bearing witness to injustice or harm and working alongside informants who have their own stake in its documentation. Not infrequently, these efforts take the form of visual interventions (Pink 2007), projects aimed at producing and disseminating images with the normative intention of effecting changes in the social field. An example of this stance might be the unmanned aircraft hobbyist who captured images of a Dallas meatpacking plant releasing pig blood into the Trinity River last fall (Mortimer 2012). Here, the aerial view is enlisted to hold a corporate actor accountable, creating a visual record of an environmental offense that led, in this case, to the initiation of legal action. Of course, one's degree of comfort with this mode of aerial viewing will depend on one's alignment with the normative aims of the viewer; in that sense, images of conscience and panopticism are not so readily disentangled. My point here is simply that aerial photography

could be a valuable tool within the paradigm of activist anthropology, providing a means of corroborating accounts of injustice through direct observation of the otherwise unobservable.

The second genre of aerial photography that I see as relevant to anthropology today is what I call *images of connectivity*, a term that I borrow from James Faubion (2009) in order to draw a distinction with Gregory Bateson's use of connectedness. Again, for Bateson, the pattern which connects is one explicitly tied to vitalism, while the mode of interrelation that I have in mind is one that would not, at least at the outset, commit itself to life as its basis. Here, I may be pushing too hard on Faubion's notion of connectivity, which I understand him to be applying to the ties that bind anthropologists to other ethical subjects who are, if not always people, probably not clouds or tufts of prairie grass either (see Faubion 2011). Still, it is Faubion who notes that

"neither men nor their battles but the ecology they together inhabit has the greater influence on the prevailing tide" (2009: 154), and here I will risk puckishly misreading him to suggest that the ecology he is referring to may be material, as well as epistemic, in nature. At any rate, this ecological relation is one that anthropological appropriations of aerial photography have been particularly successful at tracing, and I hope that this line of research will continue. For even if the lawlike determinism of the culture and ecology school (e.g., Steward 1955) has turned out to be a blind alley, the critical ecology that has replaced it must still reckon with the contingent processes of entanglement by which we and our environment make one another. Some of those tangles, which are nothing if not forms of connectivity, look more legible from the air.

The inspiration for my third genre of aerial photography is Terry Evans' aerial view of the Kansas sky, a view that I have come to associate with *images of configuration*. Here, I mean configuration in a double sense: negotiating photographic figuration in collaboration with one's informants, rather than in the mode of panopticism, but also making visible the configuration of bodies and machines and petrochemicals and expertise that make the aerial view possible. An aerial view of the aerial view is, I argue, more than just navel-gazing reflexivity. Images of configuration call attention to the sky as an environment in which *anthropos* works and plays and creates meaning. So, to engage in an aerial photography that accounts for the conditions of its own execution is to repudiate Haraway's "conquering gaze from nowhere" and to open up the aerial realm as a site for, if not fieldwork, then skywork of a parallel kind.